# **MLTI Participation Packet 2013**

For more information, please visit:



http://www.maine.gov/mlti/deployment

# **MLTI Apple Primary Solution**

### THIS PACKET CONTAINS:

MLTI Apple Program Description
Student and Staff Eligibility Guidelines
Participation and Funding Information
MLTI Participation Form 2013

## MAINE LEARNING TECHNOLOGY INITIATIVE 2013-2017 Deployment IV

## MLTI Apple Program Description

#### Goals

The MLTI goals remain:

- Equity
- Integration with Maine's Learning Results
- Sustainability / Avoiding Obsolescence
- Teacher Preparation and Professional Development
- Economic Development

At a school and classroom level, these goals can be translated into a few more tangible actionable goals: 1) changing teacher practices in ways that leverage technology to facilitate a student-centered learning environment, and 2) active participation in on-going professional development efforts.

## Professional Development

Apple Professional Development (APD) brings educational experience and curriculum knowledge to every workshop delivered. With over 10 years of collaborative work in Maine, the APD team is comprised of trained educators with years of classroom and leadership experience. APD delivers comprehensive professional development programs focused on supporting classroom teachers along with building and district leaders.

The comprehensive Professional Development plan outlined in this solution focuses on teaching and learning best practices underpinned by a long-term association with the SAMR Model, learned from the work done with MLTI. An emphasis on hands-on, engaging learning is foundational to the offerings outlined from Apple Professional Development. Whether through the use of online resources from iTunes U, face-to-face engagement in a traditional workshop setting, classroom coaching and mentoring, or as part of the Leadership Cadres, Apple's comprehensive Professional Development plan is ready to take Maine educators to new levels of capability and effectiveness.

2013-2017 Deployment IV

## Personal Digital Device

### Students Grades 7-8 (and other opt-in grades): iPad with Retina display

Students will receive the newest iPad with Retina display. iPad inspires creativity with highly reliable anytime, anywhere hands- on learning

> with features not found in any other educational tool—and in a device that students really want to use.

> > The iPad's Retina display makes everything look crisp and lifelike with razor sharp text and vibrant colors.

The iPad is incredibly thin and light, measuring just 0.37 inch thin and weighing less than 1.5 pounds. This means lighter backpacks and potentially fewer printed textbooks. The iPad has a rugged

aluminum unibody construction, no moving parts, a 9.7- inch Multi-Touch display, up to 10 hours of battery life, dual cameras, instant on and accessibility for all learners.

### Teachers 7-8 (and other opt-in teachers): 13-inch MacBook Air AND iPad mini

By combining the comfort and familiarity of the MacBook with the latest Intel processor, a dependable solid-state hard drive, long battery life, no moving parts and a rock-solid operating system, the 13-inch MacBook Air will provide teachers with a dynamic instructional tool that's reliable, secure, and easy to use. MacBook Airs will include iWork and iLife to provide powerful suites of digital content creation apps that enable teachers to design and conduct more engaging and individualized lessons.

The MacBook Air will provide a seamless transition for Maine teachers, leveraging 10 years of experience and professional development, with opportunity for immediate growth in this next generation of the MLTI. With their lesson plans, presentations, resources, and skills ready to go, coupled with new opportunities to leverage online

resources and apps from across Maine and the globe, teachers won't miss a beat.

Inclusion of an iPad mini for every teacher will ensure that teachers have a device similar to their students—albeit smaller and more mobile. This

solutions to their students via innovative tools like iBooks Author, iTunes U Course Manager, and a variety of available collaborative apps that allow for screen sharing, polling, assessment, and much more.

will allow them to deploy customized content

2013-2017 Deployment IV

## Wireless Network

Apple is once again working with Cisco Systems, the industry leader in wireless networking. The Cisco networks incorporated into our 2009 MLTI solution have been highly regarded by the school population, and we look forward to upgrading these networks in this iteration of our solution.

#### Wireless Network Equipment

- Wireless access points and switch gear and controller-less architecture for industry leading uptime and auto-recovery.
  - Full 802.11 a/b/g/n 2.4Ghz and 5Ghz wireless networking
  - 4 x 4 multiple-input multiple-output (MIMO) technology with three spatial streams, sustaining 450 Mbps rates over a greater range for more capacity and reliability.
  - Power over Ethernet (POE) capable (802.3af) Ethernet ports.
- · Connectivity
  - Gigabit speed connectivity between components comprising the wireless network.
  - Power over Ethernet (PoE) and wired Ethernet connections

## Communication and Collaboration

### **Apple TV**

By including Apple TV in our solution, MLTI classrooms will be taken to the next level of mobility. In a traditional 1:1 setting the teacher has been tethered to their projector in order to share digital content with the class. If a student wanted to share a piece of work they needed to



find their way to the projector cable and "plug in." With Apple TV the teacher can move freely around the room, projecting their full screen from anywhere, and students can do the same, all in a secure password-protected video sharing environment—which means less disruption, more classroom interaction, and more instructional minutes

2013-2017 Deployment IV

### **eBackpack**

eBackpack allows students to share and submit their work. It provides a simple and iterative workflow to improve and ease communications between students and teachers, accelerating teacher feedback and the grading process. This process occurs in a secure environment, and allows teachers to maintain a strong and clear organizational structure defined by both class and assignment.

## Back up

#### Your Data is Protected

The MacBooks will be backed up using CrashPlan, an enterprise offsite data backup and recovery service. CrashPlan provides robust backups with no need for a user to do anything. Its fully automatic.



Student and teacher iPads will be backed up using Apple's iCloud backup solution. Each user will be provided 15GB of storage space in iCloud. iCloud, like CrashPlan, is fully automatic.



## Mobile Device Management

Apple solution mobile device management software enabling students to have the applications they need, when they need them, and the ability to focus on specific tasks at hand. The Apple MLTI solution will include a self-service portal enabling schools to make apps available to students and teachers.



Individuals can visit the self-service portal and download and install the apps without the need for passwords or active intervention from the school's tech lead.

## Warranty and Support

Apple's warranty and support program will continue to provide telephone and online Help Desk services as it has over the past 10 years. This includes online dispatching and shipping services to transport devices between the school and the Apple MLTI Repair Depot. Schools will be provided spare devices to be used as loaners in the event of a break-fix event. If a device is stolen, lost, or accidentally damaged beyond repair, the Apple MLTI solution includes a buffer pool of devices equal to 2% of the total number of device across all participating Apple MLTI schools.

2013-2017 Deployment IV

### iPad with Retina Display for Students

#### **Dimensions**

•Height: 9.50 inches (241.2 mm) •Width: 7.31 inches (185.7 mm) •Depth: 0.37 inch (9.4 mm) •Weight: 1.44 pounds (652 g)

#### **Communications**

•802.11a/b/g/n Wi-Fi (802.11n 2.4GHz and 5GHz)

•Bluetooth 4.0 wireless technology

#### **Environmental Status Report**

• Mercury-free LCD display

• Arsenic-free display glass

• BFR-free

• PVC-free

• Recyclable aluminum enclosure

#### Sensors

• Three-axis gyro

Accelerometer

· Ambient light sensor

#### Input/Output

• Lightning connector

• 3.5-mm stereo headphone minijack

• Built-in speaker

• Microphone

#### Audio

•Frequency response: 20Hz to 20,000Hz

•Audio formats supported: AAC (8 to 320 Kbps), Protected AAC (from iTunes Store), HE-AAC, MP3 (8 to 320 Kbps), MP3 VBR, Audible (formats 2, 3, 4, Audible Enhanced Audio, AAX, and AAX+), Apple Lossless, AIFF, and WAV

•User-configurable maximum volume limit

#### **Processor**

• Dual-core A6X with quad-core graphics

#### Storage

• 32 GB solid state storage

#### **Battery and power**

• Built-in 42.5-watt-hour rechargeable lithium-polymer battery

•Up to 10 hours of surfing the web on Wi-Fi, watching video, or listening to music

• Charging via power adapter or USB to computer system

#### **Display**

Retina display

• 9.7-inch (diagonal) LED-backlit Multi-Touch display with IPS technology

• 2048-by-1536 resolution at 264 pixels per inch (ppi)

• Fingerprint-resistant oleophobic coating

#### **Graphics and video support**

FaceTime HD Camera

•1.2MP photos

• 720p HD video

• FaceTime video calling over Wi-Fi

• Face detection

• Backside illumination

• Tap to control exposure for video or still images

• Photo and video geotagging

#### iSight Camera

• 5MP photos

Autofocus

• Face detection

• Backside illumination

• Five-element lens

• Hybrid IR filter

• f/2.4 aperture

• Tap to focus video or still images

• Tap to control exposure for video or still images

• Photo and video geotagging

#### Video Recording

• 1080p HD video recording

Video stabilization

• Face detection

• Tap to focus while recording

Backside illumination

#### TV/Video output options

• AirPlay mirroring and video out to Apple TV (2nd and 3rd generation)

• Video mirroring and video out support: Up to 1080p through Lightning Digital AV Adapter and Lightning to VGA Adapter (adapters sold separately)

• Video formats supported: H.264 video up to 1080p, 30 frames per second, High Profile level 4.1 with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; MPEG-4 video up to 2.5 Mbps, 640 by 480 pixels, 30 frames per second, Simple Profile with AAC-LC audio up to 160 Kbps per channel, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; Motion JPEG (M-JPEG) up to 35 Mbps, 1280 by 720 pixels, 30 frames per second, audio in ulaw, PCM stereo audio in .avi file format

2013-2017 Deployment IV

#### iPad mini for Teachers

#### **Dimensions**

- •Height: 7.87 inches (200 mm)
- •Width: 5.3 inches (134.7 mm)
- •Depth: 0.28 inch (7.2 mm)
- •Weight: 0.68 pound (308 g)

#### **Communications**

- •802.11a/b/g/n Wi-Fi (802.11n 2.4GHz and 5GHz)
- •Bluetooth 4.0 wireless technology

#### **Environmental Status Report**

- Mercury-free LCD display
- Arsenic-free display glass
- BFR-free
- PVC-free
- Recyclable aluminum enclosure

#### Sensors

- Three-axis gyro
- Accelerometer
- · Ambient light sensor

#### Input/Output

- Lightning connector
- 3.5-mm stereo headphone minijack
- Built-in speaker
- Microphone

#### Audio

- •Frequency response: 20Hz to 20,000Hz
- •Audio formats supported: AAC (8 to 320 Kbps), Protected AAC (from iTunes Store), HE-AAC, MP3 (8 to 320 Kbps), MP3 VBR, Audible (formats 2, 3, 4, Audible Enhanced Audio, AAX, and AAX+), Apple Lossless, AIFF, and WAV
- •User-configurable maximum volume limit

#### **Processor**

• Dual-core A5

#### Storage

• 32 GB solid state storage

#### **Battery and power**

- Built-in 16.3-watt-hour rechargeable lithium-polymer battery
- •Up to 10 hours of surfing the web on Wi-Fi, watching video, or listening to music
- Charging via power adapter or USB to computer system

#### Display

- •7.9-inch (diagonal) LED-backlit Multi-Touch display with IPS technology
- •1024-by-768 resolution at 163 pixels per inch (ppi)
- •Fingerprint-resistant oleophobic coating

#### **Graphics and video support**

FaceTime HD Camera

- 1.2MP photos
- 720p HD video
- FaceTime video calling over Wi-Fi or cellular4
- Face detection
- Backside illumination
- Tap to control exposure for video or still images
- Photo and video geotagging

#### iSight Camera

- 5MP photos
- Autofocus
- Face detection
- Backside illumination
- Five-element lens
- Hybrid IR filter
- f/2.4 aperture
- Tap to focus video or still images
- Tap to control exposure for video or still images
- Photo and video geotagging

#### Video Recording

- 1080p HD video recording
- Video stabilization
- Face detection
- Tap to focus while recording
- Backside illumination

#### TV/Video output options

- AirPlay mirroring and video out to Apple TV (2nd and 3rd generation)
- •Video mirroring and video out support: Up to 1080p through Lightning Digital AV Adapter and Lightning to VGA Adapter (adapters sold separately)
- •Video formats supported: H.264 video up to 1080p, 30 frames per second, High Profile level 4.1 with AAC-LC audio up to 160 Kbps, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; MPEG-4 video up to 2.5 Mbps, 640 by 480 pixels, 30 frames per second, Simple Profile with AAC-LC audio up to 160 Kbps per channel, 48kHz, stereo audio in .m4v, .mp4, and .mov file formats; Motion JPEG (M-JPEG) up to 35 Mbps, 1280 by 720 pixels, 30 frames per second, audio in ulaw, PCM stereo audio in .avi file format

2013-2017 Deployment IV

### MacBook Air 13" for Teachers

#### **Dimensions**

•Height: 0.11-0.68 inch (0.3-1.7 cm) •Width: 12.8 inches (32.5 cm) •Depth: 8.94 inches (22.7 cm) •Weight: 2.96 pounds (1.35 kg)

#### Communications

•802.11ac Wi-Fi networking;3 IEEE 802.11a/b/g/n compatible

•Bluetooth 4.0 wireless technology

#### **Environmental Status Report**

•BFR-free

•PVC-free5

•Highly recyclable aluminum enclosure

•Meets ENERGY STAR 5.2 requirements

Rated EPEAT Gold

#### **Connections**

•Two USB 3 ports (up to 5 Gbps)

•Thunderbolt port (up to 10 Gbps)

•MagSafe 2 power port

•SDXC card slot

#### Audio

Stereo speakers

•Dual microphones

•Headphone port

•Support for Apple iPhone headset with remote and microphone

#### **Keyboard and Trackpad**

•Full-size backlit keyboard with 78 (U.S.) or 79 (ISO) keys, including 12 function keys and 4 arrow keys (inverted "T" arrangement) with ambient light sensor •Multi-Touch trackpad for precise cursor control; supports inertial scrolling, pinch, rotate, swipe, three-finger swipe, four-finger swipe, tap, double-tap, and drag capabilities

#### **Processor**

•1.3GHz dual-core Intel Core i5 (Turbo Boost up to 2.6GHz) with 3MB shared L3 cache

#### Memory

•4GB of 1600MHz LPDDR3 onboard memory

#### Storage

• 128 GB solid state storage

#### **Battery** and power

•Up to 12 hours wireless web

• Up to 10 hours iTunes movie playback

• Up to 30 days standby time

• Built-in 50-watt-hour lithium-polymer battery

•45W MagSafe 2 Power Adapter with cable

management; MagSafe 2 power port

#### **Electrical and Operating Requirements**

Line voltage: 100-240V ACFrequency: 50Hz to 60Hz

Operating temperature: 50° to 95° F (10° to 35° C)
Storage temperature: -13° to 113° F (-25° to 45° C)
Relative humidity: 0% to 90% noncondensing
Maximum operating altitude: 10,000 feet

Maximum storage altitude: 15,000 feet
Maximum shipping altitude: 35,000 feet

#### **Display**

•13.3-inch (diagonal) LED-backlit glossy widescreen display with support for millions of colors

•Supported resolutions:

1440 by 900 (native), 1280 by 800, 1152 by 720, and 1024 by 640 pixels at 16:10 aspect ratio and 1024 by 768 and 800 by 600 pixels at 4:3 aspect ratio

#### Graphics and video support

• Intel HD Graphics 5000

• Dual display and video mirroring: Simultaneously supports full native resolution on the built-in display and up to 2560 by 1600 pixels on an external display, both at millions of colors

• Thunderbolt digital video output

• Native Mini DisplayPort output

 DVI output using Mini DisplayPort to DVI Adapter (sold separately)

 VGA output using Mini DisplayPort to VGA Adapter (sold separately)

• Dual-link DVI output using Mini DisplayPort to Dual-Link DVI Adapter (sold separately)

• HDMI audio and video output using third-party Mini DisplayPort to HDMI Adapter (sold separately)

#### Video Recording

• 1080p HD video recording

Video stabilization

• Face detection

• Tap to focus while recording

• Backside illumination

2013-2017 Deployment IV

#### Software Included

#### The following list of software titles are preloaded onto the MLTI MacBook Air 13" devices.

#### **FaceTime**

Make video calls from your Mac to iPad 2 or later, iPad mini, iPhone 4 or later, iPod touch, or other Intel-based Mac users to easily communicate through sign language without the need of other devices.

#### Airdrop

With AirDrop, you can send files to anyone around you wirelessly — no Wi- Fi network required. And no complicated setup or special settings. Just click the AirDrop icon in the Finder sidebar, and your Mac automatically discovers other AirDrop users within about 30 feet of you. To share a file, simply drag it to someone's name. Once accepted, the fully encrypted file transfers directly to that person's Downloads folder.

#### Reminders

Organize your life on your Mac. Make as many to-do lists as you need and easily add to them. Set due dates and you'll get alerts as deadlines approach. Set a location from your Mac, and your iPhone or iPad will remind you when you get there. And to be sure you don't forget anything, iCloud keeps your reminders up to date on your Mac, iPad, iPhone, and iPod touch.

#### Safari

The world's fastest web browser for the Mac, Safari now boasts built-in RSS support. Scan the latest news, information and articles from thousands of websites in one easy-to- read, searchable article list using Safari RSS. Safari also uses strong 128-bit encryption when accessing secure sites.

#### **Preview**

Preview is a Document viewer that supports many file types such as: PDF, JPEG, TIFF, RAW, DNG, EPS, PNG, PPT, and many others. Preview allows quick and efficient viewing and mark up of PDF files.

#### **Quicktime Player**

QuickTime Player's advanced architecture provides state-of-the-art multimedia technologies that enable everything from high-definition audio and video playback to the creation of immersive environments.

#### Notes

A great idea could strike at any moment. Before you lose it, jot it down in Notes. With iCloud, all your notes stay with you on every device you use. So you can think of Notes as the keeper of anything important or anything, period.

#### Calendars

Keep track of your busy schedule and share it with others using Calendar. Create separate calendars—one for home, another for school, and so on. Calendar also works with iCloud, Yahoo!, and Google. iCloud also features calendar sharing, which can be a powerful tool for teachers to track test dates and field trips, and for students engaged in collaborative project work.

#### Keynote

Apple's simple-to-use, cinema-quality presentation software lets students create stunning presentations to share their work. And Keynote will open PowerPoint files saved in Microsoft's .ppt and .pptx file formats as well as save files into those formats.

#### Numbers

Build spreadsheets on a flexible, free-form canvas complete with tables, charts, graphics, and text. Numbers will open Excel documents saved in Microsoft's .xls and .xlsx file formats as well as save spreadsheets into these formats.

2013-2017 Deployment IV

#### **Pages**

A streamlined word processor with easy-to-use layout tools, Pages allows students to choose from hundreds of templates to create professional-looking newsletters, reports, and more. Students can use Pages to create all sorts of documents that combine text with supporting images, videos, graphs, charts, and more. And Pages will open Word files saved in Microsoft's .doc or .docx format, and can save files into these formats as well.

#### GarageBand

The easy way to record audio samples on a Mac. GarageBand provides access to music composition and seamless podcasting capabilities. With GarageBand students can create voice recordings to document progress over time.

#### **iMovie**

Bring lessons to life through video, sound, and pictures. iMovie lets students focus on content in ways that can be easily shared. In fact, teachers tell us that it is their most effective tool to support challenge-based learning.

#### iPhoto

iPhoto is a 21st century show and tell. iPhoto provides students with engaging alternative methods of demonstrating their knowledge and abilities through photos, text and audio. This visual storytelling provides a way for students with auditory processing difficulties to express themselves.

#### **Bento**

Bento is the leading personal database. Now you can organize contacts, track projects, plan events and manage lists — the fast and easy way! Get started in seconds and be infinitely more organized. Bento includes 25 templates that are ready to use at work, home, school, and in your community.

#### iBooks Author (Teacher MacBooks Only)

Available free on the Mac App Store, iBooks Author is an amazing new app that allows teachers to create beautiful Multi-Touch textbooks—and just about any other kind of book—for iPad. With galleries, video, interactive diagrams, 3D objects, and more, these books bring content to life in ways the printed page never could.

#### **Xcode**

Xcode is Apple's powerful integrated development environment for creating great apps for Mac, iPhone, and iPad. Xcode includes the Instruments analysis tool, iOS Simulator, and the latest OS X and iOS SDKs.

#### **Adobe Digital Creations**

Offers an engaging way to view and manage eBooks and other digital publications. Use it to download and purchase digital content, which can be read both online and offline. Transfer copy-protected eBooks from your personal computer to other computers or devices. Organize your eBooks into a custom library and annotate pages. Digital Editions also supports industry-standard eBook formats, including PDF/A and EPUB.

#### **Daum Equation Editor**

is designed to quickly and easily provide many types of formulas.

#### Grass GIS, Grapher

Commonly referred to as GRASS (Geographic Resources Analysis Support System), GRASS GIS is a free Geographic Information System (GIS) software used for geospatial data management and analysis, image processing, graphics/maps production, spatial modeling, and visualization. GRASS GIS is currently used in academic and commercial settings around the world, as well as by many governmental agencies and environmental consulting companies.

### SketchBook Express

SketchBook Express starts you out with a full color palette, a great selection of brushes (including two erasers, four pencils, two brush tips, and a technical pen), and three layers.

This app puts professional level digital art tools at the user's fingertips. Users can move, scale, and rotate layers, create text with a variety of fonts, colors, sizes and placement, and export finished work to the Photo Library.

2013-2017 Deployment IV

#### The following list of software titles are preloaded onto the iPad Retina & iPad mini devices.

#### **FaceTime**

FaceTime video calling via Wi- Fi, with its high-quality video and fast frame rate, is ideal for those who communicate using sign language or by lip reading. FaceTime also lets you place and receive video relay and text relay calls using services like zVRS.com and HOVRS.com.

#### Reminders

Organize your life. Make as many to- do lists as you need and easily add to them. Set due dates and you'll get alerts as deadlines approach. Set a location from your Mac, and your iPhone or iPad will remind you when you get there. Check items off your lists as you go and keep track of what you've completed. And to be sure you don't forget anything, iCloud keeps your reminders up to date on your Mac, iPad, iPhone, and iPod touch.

#### Safari

Safari, the simple-to-use web browser that comes with every Apple device, features a combined field for search terms and web addresses, tabbed browsing, and the ability to receive the latest news and information via RSS technology. With tabs in Safari, students can quickly switch between multiple web pages in a single window. This enables students to quickly and easily gather and compare information on a subject from multiple sources, which can help them learn how to evaluate information presented on the Internet. MARVEL, Maine's Virtual Library, is completely accessible via Safari in both iOS and OS X.

#### Maps

Designed by Apple from the ground up, Maps gives you turn-by-turn spoken directions, interactive 3D views, and the stunning Flyover feature. All in a beautiful vector-based interface that scales and zooms with ease. Students will be able to use maps across all their curriculum areas – from visiting their own community or the Globe Theater in Stratford- upon-Avon to traveling down the Colorado River as it flows through the Grand Canyon. Flyover allows students to see a number of major metro areas from the air with photo- realistic, interactive 3D views. Students can explore cities such as Rome in high resolution as you zoom, pan, tilt and rotate around historic landmarks such as the coliseum and the ruins of the Roman forum.

#### **Notes**

A great idea could strike at any moment. Before you lose it, jot it down in Notes. With iCloud, your notes stay with you on every device you use. So you can think of Notes as the keeper of anything important or anything, period.

#### Calendars

Keep track of your busy schedule and share it with others using Calendar. Create separate calendars—one for home, another for school, a third for work, and so on. See all your calendars in a single window or choose to see only the calendars you want. Calendar lets you create invitations using information from Contacts, update your guest list, keep track of responses, and receive the latest status information. When you or another Mac or iOS user receives a Calendar invitation via Mail, it's automatically added. Calendar also works with iCloud, Yahoo!, and Google. iCloud also features calendar sharing, which can be a powerful tool for teachers to track test dates and field trips, and for students engaged in collaborative project work.

#### Kevnote

Apple's simple-to-use, cinema-quality presentation software lets students create stunning presentations to share their work. Keynote will open PowerPoint files saved in Microsoft's .ppt and .pptx file formats as well as save files into those formats. And teachers who also have a Mac can use iCloud to have Keynote (.key) presentations available on their Mac.

#### Numbers

Build spreadsheets on a flexible, free-form canvas. So you can move tables, charts, graphics, and text anywhere you want on the page.

#### **Pages**

Pages is both a streamlined word processor and an easy-to-use page layout tool for designing media-rich documents.

2013-2017 Deployment IV

#### GarageBand

The easy way to record audio samples. GarageBand provides access to music composition and audio publishing capabilities. With GarageBand students can create voice recordings to document progress over time.

#### iMovie

Bring lessons to life through video, sound, and pictures. iMovie lets students focus on content in ways that can be easily shared. In fact, teachers tell us that it is their most effective tool to support Challenge-Based Learning.

#### iPhoto

iPhoto is a 21st century show and tell. iPhoto provides students with engaging alternative methods of demonstrating their knowledge and abilities through photos. This visual storytelling provides a way for students with auditory processing difficulties to express themselves.

#### iTunes U

iTunes U is the world's largest online catalog of free education content. Students can learn a new language, study Shakespeare or discover the cosmos on iTunes U, home to more than 500,000 free lectures, videos, books, and other resources. Among the hundreds of colleges, universities, and elementary and high schools on iTunes U, you'll find content from Stanford, Yale, MIT, Oxford, and UC Berkeley, along with other distinguished institutions, such as MoMA, New York Public Library, the Maine Department of Education, and more. Content appropriate for every grade level exists in a high-quality, easily accessible format.

#### **Bento**

Bento is the leading personal database. Now you can organize contacts, track projects, plan events and manage lists—the fast and easy way! Get started in seconds and be infinitely more organized. Bento includes 25 templates that are ready to use at work, home, school, and in your community. Easily customize them to organize virtually any type of information you have. Organize contacts, track projects, plan events and manage lists. Create your own personalized apps to track virtually any type of information you have.

#### **Notability**

Notability powerfully integrates handwriting, PDF annotation, typing, audio recording, and organizing so users can take notes in their own way.

#### GoodReader

With GoodReader on iPad, you can read virtually anything, anywhere: books, movies, maps, pictures. Annotation is a feature long sought after by users who want to add their own mark-ups to PDFs, especially those collaborating as a team on shared documents. The types of annotations that can be created and edited in GoodReader include typewriter text boxes, popup comments ("sticky notes"), text highlights, freehand drawings, lines, arrows, rectangles, ovals, cloudy shapes, text underlines, strikeouts, text insertion marks.

#### **Explain Everything**

Explain Everything is an easy-to-use design tool that lets you annotate, animate, and narrate explanations and presentations. You can create dynamic interactive lessons,

activities, assessments, and tutorials using Explain Everything's flexible and integrated design. Use Explain Everything as an interactive whiteboard using the iPad video display.

#### Wolfram Alpha

WolframAlpha has rapidly become the world's definitive source for instant expert knowledge and computation. Across thousands of domains--with more continually added-- WolframAlpha uses its vast collection of algorithms and data to compute answers and generate reports for you. This app gives you access to the full power of the WolframAlpha computational knowledge engine.

#### **MyScript Calculator**

Easy, simple and intuitive, just write the mathematical expression on the screen then let MyScript technology perform its magic converting symbols and numbers to digital text and delivering the result in real time.

#### **Graphing Calculator HD**

Graphing Calculator HD turns your iPad into an intuitive high-resolution function plotter and scientific calculator.

2013-2017 Deployment IV

#### eBackPack

In a classroom setting, no matter what the content area, assignments have to move easily between teachers and students. A clear and simple workflow is necessary. Not one-way movement of materials — it has to be easy both ways. With eBackpack teachers can share and distribute assignments and class materials from their MacBook Air or their iPad mini. The students retrieve the content on their iPad and can work on the assignment in any application available. Students do not need to be isolated — in eBackpack, they can collaborate in a secure environment. With work completed, the students easily pass their work in — and eBackpack makes sure the work stays organized by class and assignment. Now it's the teacher's turn, and they are easily able to retrieve student work via their MacBook Air or iPad mini, where they can review the student work, annotate with comments, and deliver a grade. The cycle continues as students are now able to see the teacher's comments and grading, make changes as needed and pass the work back in. In addition to the simple pass-in, pass-out workflow, eBackpack also includes e-portfolio, parent login, and many other features that will support effective use of the MLTI devices.

#### **iBooks**

The interactivity in iBooks textbooks allows support for 3D objects, interactive images, videos, and review questions, so textbooks can provide multimodal access to a subject to assist multiple learning styles. iBooks textbooks also have built-in highlighting, note-taking, search, study cards, and glossary support. Khan Academy

Khan Academy allows students to learn almost anything for free, at their own pace. Khan Academy contains a collection of over

3,500 videos covers a massive number of topics, including K-12 math, science topics such as biology, chemistry, and physics, and even the humanities with playlists on finance and history.

#### Scan

Scan is a fast and user-friendly QR reader and barcode scanner. Through the use of QR codes (which can easily be created online at a variety of websites such qrstuff.com) teachers can provide students with quicker and more direct access to a wide variety of content.

#### **Xperica**

Understanding science through textbooks can be hard. Xperica HD for the iPad brings the experience of touch to various science experiments to foster better understanding. Users can interact with various elements to see how the experiment as a whole reacts. The app is available for download free of cost and comes preloaded with a couple of experiments.

#### **Nova Elements**

Explore the elements in a whole new way. Did you ever wonder why the periodic table is shaped the way it is, what gives each element its own unique set of properties, or even how elements combine to make everyday objects such as a cup of coffee? With "NOVA Elements," explore an interactive periodic table, play a game hosted by David Pogue, or watch the two-hour NOVA program, "Hunting the Elements."

#### **NASA Visualization Explorer**

This is the NASA Visualization Explorer, the coolest way to get stories about advanced space-based research delivered right to your iPad. A direct connection to NASA1s extraordinary fleet of research spacecraft, this app presents cutting edge research stories in an engaging and exciting format. See the Earth as you1ve never seen it before; travel to places otherwise unavailable to even the most intrepid explorers!

### **DropMind Lite**

DropMind® Lite is a free mind mapping application for iPad that will help you brainstorm, organize, and present ideas and information on the go. By visualizing your thoughts and ideas you can organize your daily work effectively, and make smarter decisions faster. Mind maps are useful for note taking, recording minutes of meetings, to-do lists, draft project plans etc.

2013-2017 Deployment IV

## Student Eligibility Guidelines

All full or part-time enrolled students at participating public schools in grades 7-12 are eligible to receive an MLTI device. Students who are partially or fully enrolled in a participating school, but receive some or all of their educational services in an alternate facility or program, should be issued a device from their enrolling school. Students in grades 9-12 are only eligible if the school is participating in the MLTI 1:1 program.

Some students' specific identified needs (typically outlined in an IEP and assessed through a formal needs assessment) may preclude the use of the MLTI device. In some instances the Department may be able to provide assistance to the school to acquire appropriate assistive technology. Schools should contact the MLTI Project Office directly when the MLTI device does not meet the needs of a student.

## Staff Eligibility Guidelines

For participating 1:1 public 7-12th grade schools, the Department will provide devices to certain eligible staff members in each school. Please review the following guidelines to determine which of your school's staff are eligible to receive an MLTI device. The Department will not collect lists of eligible staff names, but participating schools should be prepared to provide that information at a later date if it becomes necessary for auditing purposes. For staff who are ineligible based on these guidelines, schools may elect to order devices at local cost:

- •All certified teachers who teach 7th 12th grade subjects including, but not limited to, mathematics, science, language arts, social studies, visual and performing arts, world languages, physical education, CTE teachers and/or special education teachers, are eligible to receive an MLTI device.
- •All certified 7th 12th grade principals, CTE directors, special education directors, deans, assistant principals, assistant CTE directors, assistant deans, guidance counselors, librarians, technology integrators, and literacy specialists are eligible to receive an MLTI device. Student teachers placed in a participating school in eligible roles as described in these guidelines are eligible for an MLTI device.
- •Licensed or certified physical therapists, occupational therapists, and speech therapists employed by the SAU and who serve participating students are eligible for an MLTI device.
- •At the SAU level, all superintendents, assistant superintendents, and curriculum directors/coordinators are eligible to receive an MLTI device.

Each participating school may request one additional device for technology support staff image and configuration testing. This device is not intended to be used as a personal workstation.

Collectively across a SAU, the SAU may request one additional device per 300 devices deployed (minimum of 1) for use by technology support staff including a district Technology Director. Devices allocated for eligible staff may not be redeployed to ineligible staff members.

2013-2017 Deployment IV

## Participation and Funding Information

Participation in the MLTI for Maine public middle schools and high schools is optional. Any Maine approved school may participate in the MLTI. The Department of Education will provide funding support for Maine public middle and high schools (see below). All costs of the MLTI in excess of any available Department of Education contribution are the responsibility of the SAU/school.

#### **Funding Support**

Maine Public Middle Schools that implement an approved MLTI 1:1 solution for grades 7-8 will receive funding support from the Department of Education toward the cost of the MLTI up to the cost of implementing the MLTI Primary Solution (device and network seats) for all eligible students and staff. Costs in excess of the Department's contribution are the responsibility of the SAU.

Maine Public High Schools\* (including the Town Academies) that implement an approved MLTI 1:1 solution will receive funding support from the Department of Education toward the cost of the MLTI up to the cost of implementing the MLTI Primary Solution for eligible teachers (device seats) and the wireless network (based on eligible student and staff seats). Costs in excess of the Department's contribution are the responsibility of the SAU/school.

Maine Career and Technical Education Centers (CTE) will receive funding support from the Department of Education toward the cost of the MLTI up to the cost of implementing the MLTI Primary Solution for eligible teachers (device seats) and the wireless network (based on eligible student and staff seats). Since CTEs are not the primary enrollment for its students, the CTE is not required to implement a 1:1 program for its students.

•Maine Public High Schools must implement a 1:1 program for at least 50% of its students to receive funding support from the Department of Education. Additionally, high schools that do not implement a school-wide (9-12) 1:1 program must have its school board approve a resolution that ensures that the SAU and school board intends to seek funding to support expanding the 1:1 program to a school-wide program in the next fiscal year.

Please visit <a href="http://www.maine.gov/mlti/deployment">http://www.maine.gov/mlti/deployment</a> to download a Cost Calculator spreadsheet that you may use to estimate your costs.

2013-2017 Deployment IV

Please visit <a href="http://www.maine.gov/mlti/deployment">http://www.maine.gov/mlti/deployment</a> to submit your opt-in information including device numbers, contact information, and shipping details. Your online data submission will result in a downloadable document that includes this agreement that you will then need to sign and return to the Department of Education via Fax 877-494-MLTI (6584) or mail:

Department of Education State House Station 23 Augusta, ME 04333-0023 ATTN: MLTI PROJECT OFFICE

## MLTI Participation Agreement

- 1. SAU agrees to deploy the MLTI devices in a 1:1 fashion that provides every individual student a personal digital device to support his/her individual learning needs.
- 2. SAU agrees to host annual parent meeting(s) to orient parents on the program, goals, and expectations.
- 3. SAU agrees to address how MLTI will support its school and district goals in its Board-approved technology plan.
- 4. SAU agrees to implement and publish on its web site Board-approved policies and procedures that allow students to take the devices home to support his/her learning.
- 5. SAU agrees to implement and publish on its web site its Board-approved Acceptable Use Policy.
- 6. SAU agrees that any fee-based programs associated to MLTI (i.e. device protection plans) will be Board-approved and published on its web site.
- 7. SAU agrees to provide to the Department the URLs for its Board-approved MLTI-related policies (#4-6)
- 8. SAU agrees to implement a Digital Citizenship and Internet Safety programs (i.e. Common Sense Media).
- 9. SAU agrees that Principals and/or Superintendents will participate in annual Department-sponsored professional development.
- 10.SAU agrees to support teacher participation in ongoing Professional Development.
- 11.SAU agrees to take take part in studies, surveys, etc. related to the MLTI.
- 12.SAU understands that all devices are leased by the State of Maine and agrees to maintain the equipment in good working order.
- 13.SAU understands that payments made (as applicable) are to reimburse the Department for the cost of participating in the program, and are not considered payments toward ownership of any equipment provided by MLTI.
- 14.SAU understands that the Department may make available to schools the opportunity to purchase equipment at the conclusion of the Department's lease if possible, but that the Department may elect to return equipment if it is in the best interest of the State.
- 15.SAU agrees that it will not install unlicensed software.
- 16.SAU agrees not to violate the manufacturer's warranty and MLTI support program (i.e. repair devices using unauthorized methods, parts, or providers, alter or modify the installed wireless network for the term of the agreement).
- 17.SAU agrees to use the MLTI repair depot or locally employ certified technicians and abide by self-service account rules established by the vendor for all warranty and out-of-warranty repairs of MLTI devices.

2013-2017 Deployment IV

- 18.SAU agrees to submit monthly reports detailing all repairs to the Department for all self-service repairs.
- 19.SAU understands that failing to return defective replacement parts in a reasonable timeframe can result in late fees and parts replacement costs. SAU agrees to pay late fees and replacement costs.
- 20.SAU agrees to include the MLTI equipment on its building catastrophic loss insurance plan.
- 21.SAU agrees to maintain accurate online asset records using the MLTI online asset management solution.

Additionally, you are accepting the responsibility participate in the Maine Learning Technology In	you have read and understand the information in this packet. ties as outlined above for each participating school in the SAU to nitiative for the school year beginning in the Fall of 2013 and ending g and agreeing to pay the Department any applicable costs as
Superintendent Signature	Date

# DO NOT PRINT THIS DOCUMENT FOR SIGNATURE. PLEASE COMPLETE THIS PROCESS ONLINE AT:

http://www.maine.gov/mlti/deployment